

ABSTRACT

5 A light modulator comprises a mirror, a substrate provided with at least one electrode,
and at least one hinge extending between the substrate and the mirror. The mirror is flexible
with the hinge being displaceable for allowing for the displacement and/or the deformation of
the mirror. Typically, there are two symmetrically disposed hinges, each including upper and
lower arms that define an angle therebetween. The upper arm is connected to the mirror, and the
lower arm is mounted to the substrate. The upper and lower arms are adapted to pivot relative to
one another thereby allowing the angle to vary and thus allowing the mirror to at least one of
10 displace and deform. When unbiased, the mirror may be plane, convex or concave. When
biased, the plane mirror adopts a curved attitude, whereas the curved mirror changes its
curvature. The upper and lower arms of each hinge are V-shaped and define an apex. The
apexes extend inwardly in a facing relationship.